

# Notice of Allowability

Application No.

09/607,096

Examiner

Johnna R Stimpak

Applicant(s)

LEVANONI ET AL.

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to supplemental response filed 3/9/05.
2. ☒ The allowed claim(s) is/are 1-5 and 8-10.
3. ☒ The drawings filed on 29 June 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 3/14/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frederick Cooperrider on March 14, 2005, in response to the supplemental amendment filed March 9, 2005.

The application has been amended as follows:

**9. (currently amended) A computer implementable method comprising:**

**(i) identifying a first set of merchandise;**

**(ii) specifying a second set of merchandise which is to be used as a referent for soliciting information relative to demand behavior for a pre-determined attribute of said first set of merchandise;**

**(iii) clustering the second set of merchandise for generating a demand profile for said pre-determined attribute of said first set of merchandise;**

**(iv) clustering the second set of merchandise for generating a demand model correlated to model-based demand attributes of said first set of merchandise, said clustering the second set of merchandise for generating a demand model comprising generating a demand model based on modeling demand as a function of major variables being selected from a group consisting of price, promotions, inventory level, and seasonal effects; and**

Art Unit: 3623

*(v) combining the generated demand profile and the generated demand model into a single encompassing model which is capable of projecting demand of the first set of merchandise,*

*wherein at least one of said clustering for generating a demand profile, said clustering for generating a demand model, and said combining the generated demand profile and generated demand model are executed on a computer central processing unit (CPU).*

*10. (currently amended) A computer system suitable for projecting demand, the computer system comprising:*

*(i) a database comprising an identified first set of merchandise;*

*(ii) a database comprising an identified second set of merchandise which is to be used as a referent for soliciting information relative to demand behavior for a pre-determined attribute of said first set of merchandise;*

*(iii) a CPU receiving inputs from the database and comprising means for:*

*(a) clustering the second set of merchandise for generating a demand profile for said pre-determined attribute of said first set of merchandise;*

*(b) clustering the second set of merchandise for generating a demand model correlated to model-based demand attributes of said first set of merchandise; and*

*(c) combining the demand profile and the demand model into a single encompassing model which is capable of projecting demand of the first set of merchandise, said clustering the second set of merchandise for generating a demand model comprising generating a demand model based on modeling demand as a function of major variables being*

Art Unit: 3623

*selected from a group consisting of price, promotions, inventory level, and seasonal effects;*

*and*

*(iv) an output display for showing the demand forecasts by the pre-determined attribute.*

***Allowable Subject Matter***

2. Claim 1-5 and 8-10 allowed.

3. The following is an examiner's statement of reasons for allowance: The cited prior art taken alone or in combination fails to teach the claimed invention set forth in claims 1-5 and 8-10. Specifically, the claims are directed to a method and computer system to project demand by identifying a set of merchandise; then clustering a second set of merchandise to generate a demand model based on modeling demand as a function of variables selected from price, promotions, inventory level and seasonal effects. This set of clustered merchandise is used as a referent for predicting behavior of the first set of merchandise. The closest prior art, the combination of Lee et al, US 5,712,985, and Emert, teaches estimating business demand and creating forecast profiles, but does not explicitly teach using a clustering algorithm applied to one set of data in order to generate a demand model based on price, promotions, inventory level and seasonal effects, to predict behavior of a first set of merchandise.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 3623

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnna R Stimpak whose telephone number is 703-305-4566.

The examiner can normally be reached on M-F 8am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS  
3/14/05

  
TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3623